

**DAQEM****DEPARTMENT OF AIR QUALITY & ENVIRONMENTAL MANAGEMENT**500 S Grand Central Parkway 1st Floor · Box 555210 · Las Vegas, NV 89155-5210
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Lewis Wallenmeyer Director · Tina Gingras Assistant Director

**AUTHORITY TO CONSTRUCT
FOR A MAJOR PART 70 SOURCE****Source:** 395
Modification: 5
Revision: 0

Company Name:	Republic Services
Company Address:	770 East Sahara Avenue, Las Vegas, Nevada 89104
Source Name:	Republic Dumpco, Inc.
Source Address:	Apex Waste Management Center East of Interstate 15/US 93 Junction, Apex, NV 89124
Airshed Name:	Apex Valley (AV)
Hydrographic Area:	216/217
Township, Range, Section:	T18S, R64E, S18 and 19 and T18S, R63E, S24
Telephone Numbers:	Source Phone (702) 599-5907 Source Fax (702) 599-5946
SIC Code:	1442: Construction Sand and Gravel 4953: Refuse Systems
NAICS Code:	212321: Construction Sand and Gravel Mining 562212: Solid Waste Landfill
Description:	Modification for haul roads, waste placement, stockpiles, and tipper engine and a revision of the Aggregate Plant, generator limits and emission unit nomenclature.

Issued this 31th day of December, 2010, by the Clark County Department of Air Quality and Environmental Management.

Richard D. Beckstead
Permitting Manager
DAQEM

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Virginia Valentine, PE, County Manager

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I ACRONYMS

Table I-1: List of Acronyms

Acronym	Term
ANFO	Ammonium Nitrate and Fuel Oil
AQR	Clark County Air Quality Regulations
ATC	Authority to Construct Certificate or Authority to Construct
BCC	Clark County Board of County Commissioners
BHP	Brake Horse Power
CAO	Field Corrective Action Order
CE	Control Efficiency
CF	Control Factor
CFR	United States Code of Federal Regulations
CO	Carbon Monoxide
CPI	Urban Consumer Price Index
DAQEM	Clark County Department of Air Quality & Environmental Management
DOM	Date of Manufacture
EF	Emission Factor
EPA	United States Environmental Protection Agency
EU	Emission Unit
H ₂ S	Hydrogen Sulfide
HAP	Hazardous Air Pollutant
HP	Horse Power
kW	kiloWatt
LON	Letter of Noncompliance
MMBtu	Millions of British Thermal Units
M/N	Model Number
MSWL	Municipal Solid Waste Landfill
N/A	Not Applicable
NAC	Nevada Administrative Code
NAICS	North American Industry Classification System
NEI	Net Emission Increase
NO _x	Nitrogen Oxides
NOV	Notice of Violation
NRS	Nevada Revised Statutes
NSPS	New Source Performance Standards
NSR	New Source Review
OP	Operating Permit
PM ₁₀	Particulate Matter less than 10 microns
ppm	Parts per Million
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
RBLC	EPA's RACT/BACT/LAER Clearinghouse database
scf	Standard Cubic Feet
SCC	Source Classification Codes
SCR	Selective Catalytic Reduction
SIC	Standard Industrial Classification
SIP	State Implementation Plan
S/N	Serial Number
SO _x	Sulfur Oxides
TCS	Toxic Chemical Substance
TRS	Total Reduced Sulfur

Acronym	Term
TSD	Technical Support Document
USGS	United States Geological Survey
UTM	Universal Transverse Mercator
VOC	Volatile Organic Compound

II GENERAL CONDITIONS

A. GENERAL REQUIREMENTS

1. This ATC does not supersede or replace any Part 70 requirements, including any permit conditions, compliance requirements and/or emission limitations outlined in the Part 70 (Title V) Operating Permit.
2. No person shall begin actual construction of a New Part 70 source, or modify or reconstruct an existing Part 70 source that falls within the preconstruction review applicability criteria, without first obtaining an Authority to Construct Permit from the Control Officer. [AQR 12.4.1.1(a)]
3. The Permittee shall post the permit in a location which is clearly visible and accessible to the facility's employees and representatives of the department. [AQR 12.4.3.1(e)(16) and 12.13]
4. The Permittee shall commence the construction, modification, or reconstruction of this source within eighteen (18) months after the date of issuance of this Authority to Construct Permit and construction shall not discontinued for a period greater than twelve (12) months. [AQR 12.4.1.1(b)]
5. The Permittee shall submit an application for a Part 70 Operating Permit within twelve (12) months after commencing operation of the modification or reconstruction authorized by the ATC, or on or before such earlier date that the Control Officer may establish. If the source submits a timely application under this condition, it may continue operating under its Authority to Construct Permit until final action is taken on its application for a new Part 70 Operating Permit. However, where an existing Part 70 Operating Permit would prohibit such construction or change in operation, the source must obtain a Part 70 Operating Permit revision before commencing operation. [AQR 12.4.1.1(b) and 12.5.2.1(a)(1) and (3)]
6. This ATC does not convey any property rights or any exclusive privilege. [AQR 12.4.3.1(e)(6)]
7. The Permittee shall pay all fees assessed pursuant to AQR Section 18. [AQR 12.4.3.1(e)(17)]

B. MODIFICATION, REVISION, RENEWAL REQUIREMENTS

1. The Permittee shall file an application for any change in the Responsible Official of the source and may implement the change immediately upon submittal of the request. [AQR 12.4.3.4(a)(1)(D) and 12.4.3.4(a)(2)(C)]
2. The Permittee shall file an application for a transfer of ownership at least 30 days prior to the date of a change in ownership or operational control of the source and such

application shall constitute a temporary ATC under the conditions of the existing permit. [AQR 12.12.2(c) and (d)]

3. The Control Officer may revise, revoke and re-issue, re-open and revise, or terminate the permit for cause. [AQR 12.4.3.1 (e)(5)]
4. The Control Officer reserves the right, upon reasonable cause, to modify existing conditions and impose additional new compliance, monitoring and control requirements. [AQR 12.4.3.1(e)(10)(B) and (C)]

C. REPORTING/NOTIFICATIONS/PROVIDING INFORMANTION REQUIREMENTS

1. The Permittee shall report start of construction, construction interruptions exceeding nine (9) months, and completion of construction to the Control Officer in writing not later than fifteen (15) working days after occurrence of the event. [AQR 12.4.3.1(e)(12)]
2. The Permittee shall provide written notification of the actual date of commencing operation, received by the Control Officer, within fifteen (15) calendar days after such date. [AQR 12.4.3.1(e)(13)]
3. The Permittee shall provide separate written notification for commencing operation for each unit of phased construction, which may involve a series of units commencing operation at different times. [AQR 12.4.3.1(e)(14)]
4. The Permittee shall retain records of all required monitoring and performance demonstration data and supporting information for five (5) years after the date of the sample collection, measurement, report, or analysis. Supporting information includes all records regarding calibration and maintenance of the monitoring equipment, all original strip-chart recordings for continuous monitoring instrumentation, and if applicable, all other records required to be maintained pursuant to 40 CFR 64.9(b). [AQR 12.4.3.1(e)(1)]
5. The Permittee shall allow the Control Officer or any authorized representative of the Control Officer upon presentation of credentials to enter the Permittee's premises where the source is located or emissions related activity is conducted to: [AQR 12.4.3.1(e)(8)]
 - a. Have access to and copy during normal business hours any records that are kept pursuant to the conditions of the permit;
 - b. Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices or operations regulated or required under this permit;
 - c. Sample or monitor substances or parameters to determine compliance with the conditions of the permit or applicable requirements; and
 - d. Document alleged violations using devices such as cameras or video equipment.
6. The Permittee shall provide the Control Officer, within a reasonable time, with any information that the Control Officer requests in writing to determine whether cause exists for revising, revoking and re-issuance or terminating the permit, or to determine compliance with the conditions of the permit. Upon request the Permittee shall also furnish to the Control Officer copies of any records required to be kept by the permit, or for information claimed to be confidential, the Permittee may furnish such records directly to the Administrator along with a claim of confidentiality. [AQR 12.4.3.1(e)(7)]

D. COMPLIANCE REQUIREMENTS

1. The Permittee shall comply with all conditions contained in this ATC. Any noncompliance constitutes a violation and is grounds for an action for non-compliance, revocation and re-issuance or the termination of the permit by the Control Officer, or the re-opening or revising of the permit by the Permittee as directed by the Control Officer. [AQR 12.4.3.1(e)(3)]
2. Each of the conditions and requirements of this permit are severable and if any are held invalid, the remaining conditions and requirements continue in effect. [AQR 12.4.3.1(e)(2)]
3. The need to halt or reduce activity to maintain compliance with the conditions of the permit is not a defense to noncompliance with any condition of the permit. [AQR 12.4.3.1(e)(4)]
4. The Permittee shall promptly report to the Control Officer (500 Grand Central Parkway, Box 555210, Las Vegas, NV 89155) upon the commencement of operation deviations from permit requirements, including those attributable to malfunction, startup, or shut-down. All reports of deviations shall identify the probable cause of the deviations and any corrective actions or preventative measures taken. [AQR 12.5.2.6(d)(4)(B) and (C)]
5. A responsible official of the source shall certify that, based on information and belief formed after a reasonable inquiry, the statements made in any document required to be submitted by any condition of the permit are true, accurate, and complete. [AQR 12.4.3.1(e)(9)]

III SOURCE-WIDE PTE SUMMARY

1. Republic Dumpco Inc. is a major source for PM₁₀, NO_x, CO, SO_x, HAP, and TCS (H₂S) and is a minor source for PM_{2.5} and VOC.

Table III-A-1: Source PTE (tons per year)¹

	PM ₁₀	PM _{2.5}	NO _x	CO	SO _x	VOC	HAP	H ₂ S
Non-fugitive PTE	264.56	18.77	128.86	131.93	196.61	18.31	10.75	0.05
Landfill Fugitive Emissions (EU: W100 Only)	0.00	0.00	0.00	0.00	0.00	32.89	32.16	147.27
Major Source Thresholds	100	100	100	100	100	100	10/25²	1³

¹Not a source-wide emission limit; values are used for determining the source status.

²Ten (10) tons for any individual HAP or 25 tons for combination of all HAPs.

³H₂S major threshold per AQR 12.2.19 (amended 10/07/04).

IV EMISSION UNITS AND APPLICABLE REQUIREMENTS

A LIST OF EMISSION UNITS, EMISSION LIMITATIONS AND PRODUCTION LIMITATIONS

1. Emission Units

Table IV-A-1: Aggregate Plant Emission Units

EU	Description	Rating (tph)	Make	Model #	Serial #
Primary Plant					
A01	Mining/Excavation	4,825			
A02	Grizzly 1	1,650			
A04	Grizzly to Primary Crusher 1	600	Crush Boss	HSI 400	6356511
	Primary Crusher 1				
	Primary Crusher 1 to Belt 1				
A07	2 Belt System (Drop from Grizzly and Belt 1 to Belt 2)	1,650			
A08	Grizzly 2	600			
A09	Grizzly 2 to Primary Crusher 2	600	Crush Boss	HSI 400	6356536
	Primary Crusher 2				
	Primary Crusher 2 to Belt 3				
A12	3 Belt System (Grizzly to Belt 2, Belt 3 to Belt 4 and Belt 4 to Belt 5)	1,650			
	2 Belt Transfers (Belt 2 to Belt 5 and Belt 5 to Stacker S1)	2,500			
A16	Stacker S1	2,500			
A17	7 Belt System (Belt Feeders 6, 7 and 8 to Belt 9, Belt 9 to	2,500			

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EU	Description	Rating (tph)	Make	Model #	Serial #
	Belt 10, Belt 10 to Belt 11, Belt 11 to Belt 12 and Belt 12 to Stacker S2)				
A22	Stacker S2	2,500			
Gabion Plant					
A23	Belt 12 to Belt 13 (From Primary Plant)	415			
A25	Belt 13 to Gabion Screen SC1	415	Telsmith	6x16 TD	275M101C160 7
	Gabion Screen SC1				
	Gabion Screen SC1 to Belt 14				
	Gabion Screen SC1 to Belt 15				
	Gabion Screen SC1 to Belt 16				
A27	Belt 14	210			
A28	Stacker S3	210			
A30	Belt 15	105			
A31	Stacker S4	105			
A33	Belt 16	105			
A34	Stacker S5	105			
Secondary Plant					
A35	Belt Feeder 17 to Belt 18	1,525			
A37	Belt 18 to Triple Deck Screens SC2 and SC3	900	JCI	6x20 TD	SAD1554A
	Triple Deck Screen SC2				
	Screen SC2 to Belt 19				
	Screen SC2 to Belt 21				
	Screen SC2 to Belt 26				
	Screen SC2 to Belt 31				
A38	Triple Deck Screen SC3	900	JCI	6x20 TD	96H02B32
	Screen SC3 to Belt 21				
	Screen SC3 to Belt 32				
A40	2 Belt System (Belt 19 to Belt 20 and Belt 20 to Stacker S6)	900			
	Belt 32 to Belt 20	900			
A42	Stacker S6	900			
A44	2 Belt System (Belt 21 to Belt 22 and Belt 22 to Stacker S7)	300			
	Additional Transfer from SC3 (via Belt 21) Included				
A46	Stacker S7	300			
A47	2 Belt Feeders to Belt 25	500			
A49	2 Belt System (Belt 26 to Belt 27 and Belt 27 to Stacker S8)	500			
A51	Stacker S8	500			
A52	2 Belt Feeders to Belt 30	500			
A58	Belt 31 to HSI 1 Crusher	600	Crush	HSI 400	101400

EU	Description	Rating (tph)	Make	Model #	Serial #
	HSI 1 Crusher		Boss		
	HSI 1 Crusher to Belt 33				
A60	Recirculation Belt 33				
Sand Plant					
A62	Belt 25 to VSI Crusher 1	200	CEMCO	70	AVE0195170
	Belt 35 to VSI Crusher 1				
	VSI Crusher 1				
	VSI Crusher 1 to Belt 34				
A65	Belt 34 to Screen SC4	300	JCI	6x20 TD	96H05D32
	Screen SC4				
	Screen SC4 to Belt 35				
	Screen SC4 to Belt 39				
A69	3 Belt System (Belt 36 to Belt 37, Belt 37 to Belt 38 and Belt 38 to Stacker S9)	210			
A72	Stacker S9	210			
A74	3 Belt System (Belt 39 to Belt 40, Belt 40 to Belt 41 and Belt 41 to Stacker S10)	200			
A77	Stacker S10	200			
Cone Plant					
A79	Belt 30 to Cone Crusher 1	300	Nordberg	HP 300	30310657
	Cone Crusher 1				
	Cone Crusher 1 to Belt 42				
A82	Belt 42 to Screens SC5 and SC6	450	JCI	6x20 TD	99H03K32
	Triple Deck Screen SC5				
	Screen SC5 to Belt 43				
	Screen SC5 to Belt 49				
	Screen SC5 to Belt 51				
A83	Triple Deck Screen SC6	450	JCI	7x20 TD	43J0491
	Screen SC6 to Belt 45				
A85	2 Belt System (Belt 43 to Belt 44 and Belt 44 to Stacker S11)	210			
A87	Stacker S11	210			
A89	4 Belt System (Belt 45 to Belt 46, Belt 46 to Belt 47, Belt 47 to Belt 48 and Belt 48 to Stacker S12)	300			
A93	Stacker S12	300			
A95	2 Belt System (Belt 49 to Belt 50 and Belt 50 to Belt 30)	250			
A98	4 Belt System (Belt 51 to Belt 52, Belt 52 to Belt 53, Belt 53 to Belt 54 and Belt 54 to Stacker S13)	450			

EU	Description	Rating (tph)	Make	Model #	Serial #
	Belt 53 to Belt 55	150			
A102	Stacker S13	450			
A104a	Belt 55 to VSI Crusher 2	150	CEMCO	80	ADEV0399180 V
	VSI Crusher 2				
	VSI Crusher 2 to Belt 39				
Wash Plant					
A106	Belt Feeder 56 to Belt 57	1,200			
A108	Belt 57 to Screens SC7 and SC8	605	JCI	6x20 TD	96H01B32
	Triple Deck Screen SC7				
	Screen SC7 to Sand Screw 1				
	Screen SC7 to Belt 61				
A109	Triple Deck Screen SC8	605	Cedar Rapids	TSS 6203-32	54400
	Screen SC8 to Sand Screw 2				
	Screen SC8 to Belt 60				
	Screen SC8 to Belt 61				
A112	Sand Screw 1 to Belt 58	70			
A113	Sand Screw 2 to Belt 58	70			
A114	2 Belt System (Belt 58 to Belt 59 and Belt 59 to Stacker S14)	140			
A116	Stacker S14	140			
A118	Belt 60 to Stacker S15	550			
A119	Stacker S15	550			
A122	2 Belt System (Belt 61 to Belt 62 and Belt 62 to Storage Hopper)	415			
A124	Storage Hopper to Belt 63	415			
A125	Belt 63 to Rock Truck	415			
A126	Rock Truck Dumping	415			
Landfill Cover Plant					
A127	Blasting	24,200 ft²/hr			
A128	Grizzly 3	1,800			
A130	Grizzly 3 to Primary Crusher 2	400	Crush Boss	400	400504
	Primary Crusher 2				
	Primary Crusher 2 to Belt 64				
A133	Grizzly 3 to Belt 64	1,400			
	2 Belt System (Belt 64 to Belt 65 and Belt 65 to Belt 66)	1,800			
A136	Belt 66 to Screen SC9	1,800	Cedar Rapids	8x20 TD	46531
	Belt 75 to Screen SC9				
	Screen SC9				
	Screen SC9 to Belt 67				
	Screen SC9 to Belt 70				
	Screen SC9 to Belt 72				

EU	Description	Rating (tph)	Make	Model #	Serial #
	Screen SC9 to Belt 74				
A138	3 Belt System (Belt 67 to Belt 68, Belt 68 to Belt 69 and Belt 69 to Stacker S16)	1,000			
A141	Stacker S16	1,000			
A143	2 Belt System (Belt 70 to Belt 71 and Belt 71 to Stacker S17)	500			
A145	Stacker S17	500			
A147	2 Belt System (Belt 72 to Belt 73 and Belt 73 to Stacker S18)	300			
A149	Stacker S18	300			
A151	Belt 74 to Cone Crusher 2	200	Svedala	S-3000	03JA08802
	Cone Crusher 2				
	Cone Crusher 2 to Belt 75				

Table IV-A-2: MSWL Emission Units

EU	Description	Rating	Make	Model #	Serial #
H01	Haul Roads – Paved	1,237,592 VMT/yr			
H02	Haul Roads - Unpaved	321,920 VMT/yr			
W08	Waste Placement	13,008,600 tons/yr			
W09	Stockpiles (Active/Inactive)	123.11 acres			
W200	Diesel Generator: DOM 1994	2,593 hp	CAT	3516	5SJ00130
W201	Diesel Generator: DOM 1996	2,593 hp	CAT	3516	7RN00440
W203	Diesel Generator: DOM 1998	1,072 hp	CAT	3412CDITA	2WJ02059
W204	Diesel Generator: DOM 1998	1,108 hp	CAT	3412CDITA	2WJ01887
W205	Diesel Tipper Engine: DOM Pre-2006	150 hp	CAT	3208	35601941
W206	Diesel Generator: DOM Pre-2006	188 bhp	Cummins	6CT8.3-G2	F99093314
W207	Diesel Generator: DOM Pre-2006	188 bhp	Cummins	6CT8.3-G2	F99093315
W208	Diesel Generator: DOM Pre-2006	77 bhp	Isuzu	QD145 "6BD1"	3647886
W209	Diesel Generator: DOM Pre-2006	315 hp	CAT	3406	90U16559
W210	Diesel Tipper Engine: DOM 2007	173 bhp	CAT	3056E	35603786
W211	Diesel Tipper Engine: DOM 2007	173 bhp	CAT	3056E	35603782
W212	Diesel Tipper Engine: DOM 2007	115 hp	John Deere	4045H	PE4045H638663
W213	Diesel Tipper Engine, 115 hp, DOM 2006	115 hp	John Deere	4045HF275	TBD ¹

¹TBD = To Be Determined

2. Emission Limitations

Aggregate Plant

- a. The Permittee shall not allow actual emissions from each emission unit to exceed the PTE listed in Table IV-A-3 in any consecutive 12-month period.

Table IV-A-3: Aggregate Plant PTE (tons per year)

EU	PM ₁₀	EU	PM ₁₀	EU	PM ₁₀
A01	0.32	A46	0.03	A106	0.12
A02	0.03	A47	0.07	A108	0.01
A04	0.04	A49	0.09	A109	0.01
A07	0.18	A51	0.05	A112	0.01
A08	0.02	A52	0.09	A113	0.01
A09	0.04	A58	0.02	A114	0.01
A12	0.46	A60	0.05	A116	0.01
A16	0.16	A62	0.02	A118	0.01
A17	1.13	A65	0.59	A119	0.01
A22	0.16	A69	0.03	A122	0.01
A23	0.02	A72	0.01	A124	0.01
A25	0.37	A74	0.07	A125	0.01
A27	0.01	A77	0.02	A126	0.01
A28	0.01	A79	0.02	A128	0.02
A30	0.01	A82	0.74	A130	0.01
A31	0.01	A83	0.74	A133	0.19
A33	0.01	A85	0.03	A136	1.11
A34	0.01	A87	0.01	A138	0.14
A35	0.14	A89	0.14	A141	0.05
A37	1.22	A93	0.03	A143	0.05
A38	1.22	A95	0.05	A145	0.02
A40	0.21	A98	0.15	A147	0.02
A42	0.07	A102	0.03	A149	0.01
A44	0.10	A104a	0.01	A151	0.01

- b. The Permittee shall not discharge into the atmosphere, from any emission unit, any air contaminant in excess of an average of 20 percent opacity for a period of more than 6 consecutive minutes, unless otherwise required by this permit. [AQR 26.1.1]
- c. The Permittee shall not discharge into the atmosphere fugitive dust emissions from screens, conveyors and transfer points that commenced construction, modification or reconstruction after April 22, 2008 (EUs: A02, A07, A08, A12, A16, A17, A22, A23, A25, A27, A28, A30, A31, A33, A34, A35, A37, A38, A40, A42, A44, A46, A47, A49, A51, A52, A60, A65, A69, A72, A74, A77, A82, A83, A85, A87, A89, A93, A95, A98, A102, A106, A128, A133, A136, A138, A141, A143, A145, A147 and A149) in excess of an average of 7.0 percent opacity for a period of more than 6 consecutive minutes. [40 CFR 60, Subpart 000]
- d. The Permittee shall not discharge into the atmosphere fugitive dust emissions from crushers that commenced construction, modification or reconstruction after April 22, 2008 (EUs: A04, A09, A58, A62, A79, A104a, A130 and A151) in excess of an average of 12.0 percent opacity for a period of more than 6 consecutive minutes. [40 CFR 60, Subpart 000]

- e. The Permittee shall not discharge into the atmosphere visible emissions from emission units specified in this document as either an enclosed or wet process (EUs: A108, A109, A112, A113, A114, A116, A118, A119, A122, A124, A125 and A126). [AQR 12.4.3.(e)(10)(a)]
- f. The Permittee shall not allow actual stack emissions from each baghouse for emission units that commenced construction, modification or reconstruction after April 22, 2008 to exceed the concentration rates listed in Table IV-A-4. [40 CFR 60, Subpart 000]
- g. The Permittee shall not allow actual emissions from each emission unit to exceed the mass emission rates listed in Table IV-A-4.

Table IV-A-4: Aggregate Plant Emission Rates and Concentrations

EU	PM ₁₀ Emission Rate (pounds per hour)	PM Stack Emission Concentrations	
		(g/dscm)	(gr/dscf)
A04	0.01	0.032	0.014
A09	0.01	0.032	0.014
A58	0.01	0.032	0.014
A62	0.01	0.032	0.014
A79	0.01	0.032	0.014
A104a	0.01	0.032	0.014
A130	0.01	0.032	0.014
A151	0.01	0.032	0.014

- h. The Permittee shall not allow actual emissions from each emission unit to exceed the PTE listed in Table IV-A-5 in any consecutive 12-month period.

Table IV-A-5: Blasting PTE (tons per year)

EU	PM ₁₀	NO _x	CO
A127	8.31	5.50	29.11

MSWL

- i. The Permittee shall not allow actual emissions from each emission unit to exceed the PTE listed in Table IV-A-6 in any consecutive 12-month period.

Table IV-A-6: MSWL PTE (tons per year)

EU	PM ₁₀	PM _{2.5}	NO _x	CO	SO _x	VOC	HAP
H01	93.69	0.00	0.00	0.00	0.00	0.00	0.00
H02	121.85	0.00	0.00	0.00	0.00	0.00	0.00
W08	1.04	0.00	0.00	0.00	0.00	0.00	0.00
W09	3.59	0.00	0.00	0.00	0.00	0.00	0.00
W200	0.02	0.02	2.77	0.25	0.02	0.08	0.03
W201	1.38	1.38	37.54	20.90	1.11	3.54	1.53
W203	0.50	0.50	15.23	2.44	0.33	0.40	0.45
W204	0.29	0.29	9.93	1.67	0.22	0.26	0.30
W205	0.55	0.55	7.83	1.69	1.09	0.67	0.13
W206	0.20	0.20	5.47	0.45	0.14	0.14	0.20
W207	0.20	0.20	5.47	0.45	0.14	0.14	0.20
W208	0.01	0.01	0.07	0.02	0.01	0.01	0.01
W209	0.02	0.02	0.30	0.06	0.01	0.03	0.01
W210	0.26	0.26	6.35	0.79	1.55	0.35	0.17

EU	PM ₁₀	PM _{2.5}	NO _x	CO	SO _x	VOC	HAP
W211	0.26	0.26	6.35	0.79	1.55	0.35	0.17
W212	0.21	0.21	4.33	0.83	1.03	0.33	0.02
W213	0.24	0.24	4.31	4.14	1.03	0.32	0.02

- j. The Permittee shall maintain paved haul roads so not to discharge into the atmosphere fugitive dust emissions in excess of an average opacity of 20 percent for a period of more than 6 consecutive minutes (EU: H01). [AQR 26.1.1]
- k. The Permittee shall maintain the unpaved haul roads so not to discharge into the atmosphere fugitive dust emissions in excess of an average opacity of 20 percent for a period of more than 6 consecutive minutes (EU: H02). [AQR 26.1.1]
- l. The Permittee shall not discharge into the atmosphere, from any emission unit at the MSWL, any air contaminant in excess of an average of 20 percent opacity for a period of more than 6 consecutive minutes, unless otherwise required by this permit. [AQR 26.1.1]
- m. As of May 3, 2013, the Permittee shall comply with the applicable emission limitations and operating limitations of 40 CFR 63 Subpart ZZZZ at all times (EUs: W200, W201, W203 through W209). [40 CFR 63.6605(a)]

3. Production Limitations

Aggregate Plant

- a. The Permittee shall limit the amount of material processed at the aggregate plant to the production rates listed in Table IV-A-7 in any consecutive 12-month period.

Table IV-A-7: Maximum Allowable Production Throughputs

EU	Description	Plant	tons/year
A01	Mining/ Excavation	Primary Plant	7,000,000
A25	Gabion Screen	Gabion Plant	1,000,000
A37	Triple Deck Screen SC2	Secondary Plant	3,300,000
A38	Triple Deck Screen SC3	Secondary Plant	3,300,000
A62	VSI Crusher	Sand Plant	1,600,000
A79	Cone Crusher 1	Cone Plant	2,000,000
A108	Triple Deck Screen SC7	Wash Plant	3,500,000
A109	Triple Deck Screen SC8	Wash Plant	3,500,000
A130	Primary Crusher 2	Landfill Cover Plant	1,000,000
A136	Screen SC9	Landfill Cover Plant	3,000,000

- b. The Permittee shall limit the total amount of surface area blasted to 1,733,886 ft² in any consecutive 12-month period.

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- c. The Permittee shall limit the total vehicles miles traveled (VMT) on paved roads to not more than 1,237,592 miles traveled in any consecutive 12-month permit (EU: H01).
- d. The Permittee shall limit the total vehicles miles traveled (VMT) on unpaved roads to not more than 321,920 miles traveled in any consecutive 12-month permit (EU: H02).
- e. The Permittee shall not exceed the maximum amount of throughput for the Waste Placement of 13,008,600 tons in any consecutive 12-month period (EU: W08).

- f. The Permittee shall limit the total area of stockpiles to not more than 77.03 acres of active stockpiles and 46.08 acres of inactive stockpiles (EU: W09).
- g. The Permittee shall limit the operation of the generator (EU: W200) to a total of 100 hours in any consecutive 12-month period.
- h. The Permittee shall limit the operation of the generator (EU: W201) to a total of 3,200 hours in any consecutive 12-month period.
- i. The Permittee shall limit the operation of the generator (EU: W203) to a total of 2,500 hours in any consecutive 12-month period.
- j. The Permittee shall limit the operation of the generator (EU: W204) to a total of 1,400 hours in any consecutive 12-month period.
- k. The Permittee shall limit the operation of the Tipper Engine (EU: W205) to a total of 4,380 hours in any consecutive 12-month period.
- l. The Permittee shall limit the operation of each well generator (EUs: W206 and W207) to a total of 4,387 hours per generator in any consecutive 12-month period.
- m. The Permittee shall limit the operation of the generator (EU: W208) to a total of 100 hours in any consecutive 12-month period.
- n. The Permittee shall limit the operation of the generator (EU: W209) to a total of 75 hours in any consecutive 12-month period.

B CONTROL REQUIREMENTS

Aggregate Plant

- 1. The Permittee shall apply wet suppression to maintain moisture content and control emissions within allowable limits at the aggregate plant. Each mineral processing emission unit that is not connected to baghouse controls or part of the wet process shall incorporate an effective water spray system that is maintained in good operating condition at all times. [AQR 41.1.1]
- 2. The Permittee shall not cause or allow fugitive dust to become airborne without taking reasonable precautions and shall not cause or allow the discharge of fugitive dust in excess of 100 yards from the point of origin or beyond the lot line of the property on which the emissions originate, whichever is less. [AQR 41.1.1.1(a)]
- 3. The Permittee shall use baghouses to control particulate emissions at all times the processing equipment is operating (EUs: A04, A09, A58, A62, A79, A104a, A130 and A151). [AQR 12.4.3.1(e)(10)]
- 4. The Permittee shall maintain each of the baghouses in good operating condition to achieve a particulate control efficiency of 99.0 percent (EUs: A04, A09, A58, A62, A79, A104a, A130 and A151). [AQR 12.4.3.1(e)(10)]
- 5. The Permittee shall maintain an effective seal around each of the baghouses and the pressure drop across each baghouse shall be maintained within the limits specified by the manufacturer. [AQR 12.4.3.1(e)(10)]
- 6. The Permittee shall operate emissions control devices for individual emission units as indicated in Table IV-B-1. [AQR 12.4.3.1(e)(10)]

Table IV-B-1: Summary of Add-On Control Devices For Aggregate Plant

EU	Device Type	Manufacturer ¹	Model # ¹	Serial # ¹	Pollutant
A04	Baghouse	Donaldson Torit	CPV-12	2797228	PM ₁₀
A09	Baghouse	Donaldson Torit	CPV-12	2797228	PM ₁₀
A58	Baghouse	SiloAir-DCC	VS20KS 3	98-1296/01	PM ₁₀
A62	Baghouse	SiloAir-DCC	VS20KS 3	98-1296/02	PM ₁₀
A79	Baghouse	PneumaFil	85168	643	PM ₁₀
A104a	Baghouse	PneumaFil	85168	643	PM ₁₀
A130	Baghouse	Donaldson Torit	CPV-12	2797229	PM ₁₀
A151	Baghouse	SiloAir-DCC	VS20KS 3	99-1141/01	PM ₁₀

¹TBD = To be Determined

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7. The Permittee shall operate the three generator IC engines with turbochargers (EUs: W200, W203, W204). *[AQR 12.4.3.1(e)(10)]*
8. The Permittee shall operate the generator IC engine with a turbocharger and aftercooler (EU: W201). *[AQR 12.4.3.1(e)(10)]*
9. The Permittee shall operate the tipper IC engines with turbochargers and aftercoolers (EUs: W206 and W207). *[AQR 12.4.3.1(e)(10)]*
10. As of May 3, 2013, the Permittee shall minimize all RICE engines' time spent at idle during startup and minimize all engines' startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards are applicable to all time other than start up (EUs: W205 through W209). *[40 CFR 63.6625(h)]*
11. As of May 3, 2013, the Permittee shall only use diesel fuel in each engine with a maximum sulfur content of 15 ppm and either a minimum cetane index of 40 or a maximum aromatic content of 35 percent by volume (EUs: W200, W201, W203, W204, and W209). *[40 CFR 63.6604]*
12. As of May 3, 2013, the Permittee shall comply with the following emission limitations for the four Caterpillar diesel powered IC engines (EUs: W200, W201, W203, and W204): *[40 CFR 63.6600(d)]*
 - a. limit the concentration of CO in the exhaust to 23 ppmvd or less at 15 percent oxygen; or
 - b. reduce the CO emission by 70 percent or more from the currently permitted emission limits.
13. As of May 3, 2013, the Permittee shall limit the concentration of CO in the exhaust to 230 ppmvd or less 15 percent oxygen for the diesel powered IC engines (EUs: W205 through W207 inclusive). *[40 CFR 63.6600(d)]*
14. As of May 3, 2013, the Permittee shall comply with the following work and management practices for the Isuzu diesel powered IC engine (EU: W208): *[40 CFR 63.6600(d)]*
 - a. change the oil and filter every 1,000 hours of operation or annually, whichever comes first;
 - b. inspect the air filter every 1,000 hours of operation or annually whichever comes first; and

- c. inspect all belts and hoses ever 500 hours of operation or annually whichever comes first.
15. As of May 3, 2013, the Permittee shall comply with the following emission limitations for the Caterpillar diesel powered IC engine (EU: W209): *[40 CFR 63.6600(d)]*
- a. limit the concentration of CO in the exhaust to 49 ppmvd or less at 15 percent oxygen; or
 - b. reduce the CO emissions by 70 percent or more from the currently permitted emission limit.
16. As of May 3, 2013, the Permittee shall comply with either condition (EUs: W201, W203 through W209 inclusive): *[40 CFR 63.6625(g)]*
- a. Install a closed crankcase ventilation system that prevents crankcase emission from being emitted to the atmosphere; or
 - b. Install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates, and metals.
 - i. the Permittee shall follow manufacturer's specified maintenance requirements for operating and maintaining the open crankcase ventilation system and replace the crankcase filters as specified.
17. As of May 3, 2013, the Permittee shall operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instruction or develop their own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions (EUs: W200, W201, W203, W204 through W209). *[40 CFR 63.6625(e)]*
18. As of May 3, 2013, the Permittee shall install non-resettable hour meters on all reciprocating IC engines (EUs: W200, W201, W203, W204 through W209). *[40 CFR 63.6625(e)]*
19. As of May 3, 2013, the Permittee shall at all times operate and maintain the reciprocating IC engines, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the Permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source (EUs: W200, W201, W203, W204 through W209). *[40 CFR 63.6605(b)]*
20. The Permittee shall use only diesel fuel with a maximum sulfur content of 15 ppm and either a minimum cetane index of 40 or a maximum aromatic content of 35 percent by volume in the diesel engines (EUs: W210, through W213 inclusive). *[40 CFR 60.4207(a)]*
21. The Permittee shall operate in such a manner that odors will not cause a nuisance. *[AQR 43] (Local enforceability only)*
22. The Permittee must comply with control requirements contained in this section. If there is inconsistency between standards or requirements, the most stringent standard or requirement shall apply.

C MONITORING

Aggregate Plant

1. This source is required to comply with the monitoring requirements in 40 CFR 60, Subpart OOO.
2. The Permittee shall perform at least one visual emissions observation on a facility-wide basis each day. If visible emissions that appear to exceed the opacity limit(s) are observed, the opacity of emissions shall be visually determined in accordance with 40 CFR 60 Appendix A: Reference Method 9. Corrective actions shall be taken to minimize any emissions that exceed opacity limits as soon as practicable. [AQR 26.1]
3. The Permittee shall inspect the water spray system daily and investigate and correct any problems before resuming operations. [AQR 12.4.3.1(e)(10)]
4. The Permittee shall conduct daily monitoring of the pressure drop across each baghouse cell with the installation and operation of a pressure differential (Magnahelic) gauge per manufacturer's specifications. [AQR 12.4.3.1(e)(10)]
5. The Permittee shall visually inspect the baghouse interior at least monthly for air leaks. Defective baghouse compartments shall be sealed off and repairs completed within 5 working days of the discovery of the malfunction. Should the malfunction cause the baghouse to be ineffective in controlling particulate emissions, the processing of material shall cease until such repairs to the baghouse are completed. [AQR 12.4.3.1(e)(10)]
6. The Permittee shall have a standard operating procedures (SOP) manual for baghouses. The procedures specified in the manual for maintenance shall, at a minimum, include a preventative maintenance schedule that is consistent with the baghouse manufacturer's instructions for routine and long-term maintenance. [AQR 12.4.3.1(e)(10)]

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1. The Permittee shall perform at least one visual emissions observation on the MSWL facility each day. Daily visual observations shall include the haul roads, waste placement, stockpiles and generator engines, while operating if possible, to demonstrate compliance with the opacity limits. If visible emissions that appear to exceed the opacity limit(s) are observed, the opacity of emissions shall be visually determined in accordance with 40 CFR 60 Appendix A: Reference Method 9. Corrective actions shall be taken to minimize any emissions that exceed opacity limits as soon as practicable. [AQR 26.1]
2. The Permittee shall ensure compliance with the provisions of 40 CFR 60, Subpart IIII contained within this document by demonstrating all of the following: [40 CFR 60.424211(b)]
 - a. Operation of the diesel engines (EUs: W210, through W213 inclusive) according to the manufacturer's written instructions or procedures developed by the Permittee that are approved by the engine manufacturer; and
 - b. the keeping of records of engine manufacturer data indicating compliance with the emission standards.

D TESTING

Aggregate Plant

1. Compliance with the opacity standards of this permit shall be demonstrated, in part, through performance testing in accordance with 40 CFR 60 Reference Method 9 (Standards for Opacity). *[40 CFR 60.675(b)(2)]*
2. The Permittee shall conduct performance testing for opacity standards on all emission units in the aggregate plant except mining and blasting (EUs: A02, A04, A07, A08, A09, A12, A16, A17, A22, A23, A25, A27, A28, A30, A31, A33, A34, A35, A37, A38, A40, A42, A44, A46, A47, A49, A51, A52, A58, A60, A62, A65, A69, A72, A74, A77, A79, A82, A83, A85, A87, A89, A93, A95, A98, A102, A104a, A106, A128, A130, A133, A136, A138, A141, A143, A145, A147, A149 and A151) according to the following conditions:
 - a. The Permittee is required to comply with the performance testing requirements of 40 CFR 60, Subpart OOO. *[40 CFR 60.675]*
 - b. Subsequent performance testing shall be conducted every five years. *[AQR 12.4.3.1(e)(10)]*
3. Compliance with the mass emission standards of this permit and concentration standards in 40 CFR 60, Subpart OOO shall be demonstrated through performance testing in accordance with 40 CFR 60 Reference Method 5 or 17. *[40 CFR 60.675(b)(1)]*
4. The Permittee shall conduct performance testing on the baghouse stack exhaust points (EUs: A04, A09, A58, A62, A79, A104a, A130 and A151) according to the following conditions:
 - a. The Permittee is required to comply with the performance testing requirements of 40 CFR 60, Subpart OOO. *[40 CFR 60.675]*
 - b. Subsequent performance testing shall be conducted every five years. *[AQR 12.4.3.1(e)(10)]*
5. Subsequent performance testing shall be conducted every five years on or before the anniversary date of the initial performance test in accordance with Table IV-D-1.

TABLE IV-D-1: Performance Test Frequency

Emission Units	Description	Test Method	Pollutant	Frequency
A02, A04, A07, A08, A09, A12, A16, A17, A22, A23, A25, A27, A28, A30, A31, A33, A34, A35, A37, A38, A40, A42, A44, A46, A47, A49, A51, A52, A58, A60, A62, A65, A69, A72, A74, A77, A79, A82, A83, A85, A87, A89, A93, A95, A98, A102, A104a, A106, A128, A130, A133, A136, A138, A141, A143, A145, A147, A149 and A151	Aggregate Plant	EPA Method 9	Opacity	Initially and every 5 years
A04, A09, A58, A62, A79, A104a, A130 and A151	Process A Crushers	EPA Method 5 or Method 17	PM	Initially and every 5 years

MSWL

1. As of May 3, 2013, the Permittee shall performance test the IC engines per the requirements of 40 CFR 63.6610 and 63.6620 (EUs: W200, W201, W203 and W204). *[40 CFR 63.6610 and 63.6620]*
2. As of May 3, 2013, the Permittee shall performance test the IC engines per the requirements in 40 CFR 63.6612 (EUs: W205 through W209 inclusive). *[40 CFR 63.6612]*
3. As of May 3, 2013, the Permittee shall perform subsequent testing every 8,760 hours or every three years, whichever comes first (EUs: W200, W201, W203 and W204). *[40 CFR 63.6615]*
4. As of May 3, 2013, if the Permittee elects to reduce the CO emission of IC engines by 70 percent of the permitted emission limit according to the emissions limitations specified in Section III-B-3, the Permittee shall follow the methods for calculating the percent reduction according to the procedures detailed in 40 CFR 63.6620(e)(1) (EUs: W200, W201, W203 and W204). *[40 CFR 63.6620]*
5. As of May 3, 2013, the Permittee shall select to comply with the emission limitation to reduce CO as specified in Conditions in IV-B-12, 13 and 15, and without the use of an oxidative catalyst the Permittee shall petition the Control Officer for operating limitations to be established during the initial performance test and continuously monitored thereafter; or for approval of no operating limitations. The Permittee shall not conduct the initial performance test until after the petition has been approved by the Control Officer. *[40 CFR 63.6620(f)]*
6. As of May 3, 2013, the Permittee shall submit a Notification of Intent to conduct a performance test to the Control Officer, DAQEM Compliance Division at least 60 days before the performance test is scheduled to begin as required in 40 CFR 63.7(b)(1) (EUs: W200, W201, W203, W204 through W209 inclusive). *[40 CFR 63.6645(f)]*
7. As of May 3, 2013, the Permittee shall conduct initial performance tests in Table III-D-3 within 180 days after the compliance date that is specified for your stationary RICE in 40 CFR 63.6595 and according to the provisions in 40 CFR 63.7(a)(2) (EUs: W200, W201, W203, W204 through W209 inclusive). *[40 CFR 63.6610(a) and 63.6612]*

Table III-D-3: Performance Test Methods for EU: W200, 201, 203, and 204 through W209

Reference	EPA Test Method
40 CFR Part 60 Appendix A	Method 10, or ASTM Method D6522-00
40 CFR Part 63 Appendix A	Method 320, or ASTM D6348-03

E RECORD KEEPING

Aggregate Plant

1. The Permittee shall comply with all applicable record keeping requirements of 40 CFR 60, Subpart OOO and any other applicable regulations. *[AQR 19.4.1.3(b)/12.4.3.1(e)(10)]*
2. The Permittee shall maintain records on site that include at a minimum: *[AQR 19.4.1.3(b)/12.4.3.1(e)(10)]*
 - a. monthly and 12-month rolling total throughput for EUs: A01, A25, A36, A38, A62, A79, A108, A109, A130 and A136;

- b. hourly and 12-month rolling total amount of surface area blasted (EU: A127);
- c. daily inspections of water spray systems;
- d. daily baghouse pressure differential (EUs: A108, A109, A112, A113, A114, A116, A118, A119, A122, A124, A125 and A126);
- e. monthly inspection and maintenance of baghouses;
- f. dates and time when visible emission observations are taken and the steps taken to make any necessary corrections to bring opacity into compliance; and
- g. performance test results

MSWL

- 3. The Permittee shall maintain records on site that include at a minimum: *[AQR 19.4.1.3(b)/12.4.3.1(e)(10)]*
 - a. 12-month rolling total amount of Vehicle Miles Traveled on the Paved and Unpaved Haul Roads (EUs: H01 and H02);
 - b. monthly and 12-month rolling total amount of waste placement (EU: W08);
 - c. 12-month rolling total hours of operation for the diesel engines (EUs: W200, W201, W203, W204, W205, W206, W207, W208 and W209)
 - d. sulfur content of diesel fuel used for engines;
 - e. cetane index or aromatic content (in percent by volume) of diesel fuel combusted in EUs: W210 through W213;
 - f. The Permittee shall submit the reports listed in Table 7 of 40 CFR Part 63 Subpart ZZZZ, as applicable and according to the requirements specified in 63.6650 by May 3, 2013 (EUs: W200, W201, W203, W204 through W209 inclusive); and
 - g. performance test results

F REPORTING

- 1. Each annual report shall be:
 - a. based on the preceding calendar year;
 - b. submitted on or before March 31 each year; and
 - c. addressed to the attention of the Control Officer, Compliance Division.
- 2. Each report shall contain:
 - a. as the first page of text, a signed certification containing the sentence "I certify that, based on information and belief formed after reasonable inquiry, the statements contained in this document are true, accurate and complete." This statement shall be signed and dated by a responsible official of the company. (a sample form is available from DAQEM);
 - b. an annual summary of all items listed in Section IV-E-2 (a and b) and Section IV-E-3 (a through c);

- c. the calculated actual annual emissions from each emission unit, even if there was no activity, and the total calculated actual annual emissions for the source.
3. This source is required to comply with the reporting and notification requirements of 40 CFR 60, Subpart OOO.
4. Pursuant to AQR Section 25, any upset/breakdown or malfunction that cause emissions of regulated air pollutants to exceed any limits set by regulation or by this permit, shall be reported to the Control Officer within 1 hour of the onset of such event.

G MITIGATION

1. The source has no federal offset requirements.

V INCREMENT

Table V-1: PSD Increment Consumption

Pollutant	Averaging Period	PSD Increment Consumption by the Source ($\mu\text{g}/\text{m}^3$)	Location of Maximum Impact	
			UTM X (m)	UTM Y (m)
SO ₂	3-hour	23.86 ¹	691820	4027161
SO ₂	24-hour	5.81 ¹	691512	4028059
SO ₂	Annual	1.11	691485	4028356
PM ₁₀	24-hour	25.14 ¹	691616	4027961
PM ₁₀	Annual	5.81	691536	4027155
NO _x	Annual	1.88	691467	4028555

¹Modeled High 2nd High Concentration

Table V-1 shows the location of the maximum impact and the potential PSD increment consumed by the source at that location. The impacts are below the PSD increment limits.